

KELLEY DRYE & WARREN LLP

A LIMITED LIABILITY PARTNERSHIP

TYSONS CORNER

8000 TOWERS CRESCENT DRIVE

SUITE 1200

VIENNA, VIRGINIA 22182

(703) 918-2300

FACSIMILE

(703) 918-2450

www.kelleydrye.com

NEW YORK, NY
WASHINGTON, DC
CHICAGO, IL
STAMFORD, CT
PARSIPPANY, NJ

BRUSSELS, BELGIUM

AFFILIATE OFFICES
JAKARTA, INDONESIA
MUMBAI, INDIA

DIRECT LINE: (703) 918-2317

EMAIL: jprice@kelleydrye.com

September 7, 2004

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: Ex Parte Notice
Carrier Current Systems, Including Broadband over Power Line Systems;
Amendment of Part 15 Regarding New Requirements and Measurement
Guidelines for Access Broadband over Power Line Systems (ET Docket
No. 04-37)

Dear Ms. Dortch:

Pursuant to 1.1206(b) of the Commission's Rules, this is to notify you that Tom Tormey and Vijay Dhingra of Echelon Corp. ("Echelon") and Glenn B. Manishin and Joseph Price, counsel to Echelon, met on September 2, 2004, with Karen E. Rackely, Alan J. Scrimme, Alan Stillwell and Anh Wride, of the Office of Engineering and Technology, to discuss the issues in the above-referenced proceeding. The parties discussed the issues previously raised by Echelon in its written Comments and Reply Comments in this proceeding, including the definition of Access BPL. Also present and supporting the discussion of Echelon's proposed definition of Access BPL was Brett Kilbourne, Director of Regulatory Services & Associate Counsel, United PowerLine Counsel. The attached document, "FCC Access BPL Presentation," was distributed and discussed at the meeting.

KELLEY DRYE & WARREN LLP

Marlene H. Dortch
September 7, 2004
Page Two

Pursuant to the Commission's Rules, this notice is being filed electronically through the Commission's Electronic Comment Filing System. If there are any questions concerning this notice, please let me know.

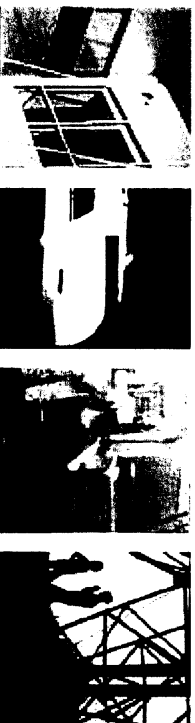
Sincerely,

A handwritten signature in black ink, appearing to read "Manishin".

Glenn B. Manishin
W. Joseph Price

Enclosure

cc: Karen E. Rackley, OET
Alan Scrim, OET
Alan Stillwell, OET
Anh Wride, OET

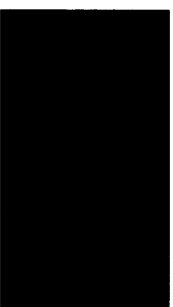
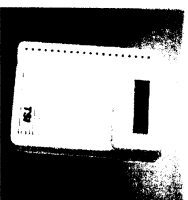


FCC Access BPL Presentation

2 September 2004

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Who is Echelon?



- **Echelon is a networking company that makes an open, standards-based infrastructure called LonWorks**
 - LonWorks enables everyday devices to be made “smart” and to communicate with one another and the Internet
- **Echelon is the leader in networking everyday devices**
 - Approximately 50,000,000 LonWorks enabled processors shipped, thousands of OEMs
 - Authorized network integrators, developers, and educational partners worldwide

Echelon makes tools for building end-to-end solutions...



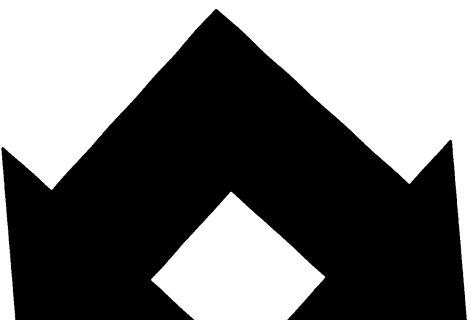
POWERED™
by **ECHELON**

Panoramix™

Network Management
and Enterprise Software



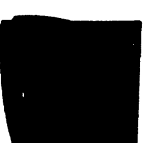
Development Tools



Power Line & Twisted Pair
Transceivers, Controllers, NICs



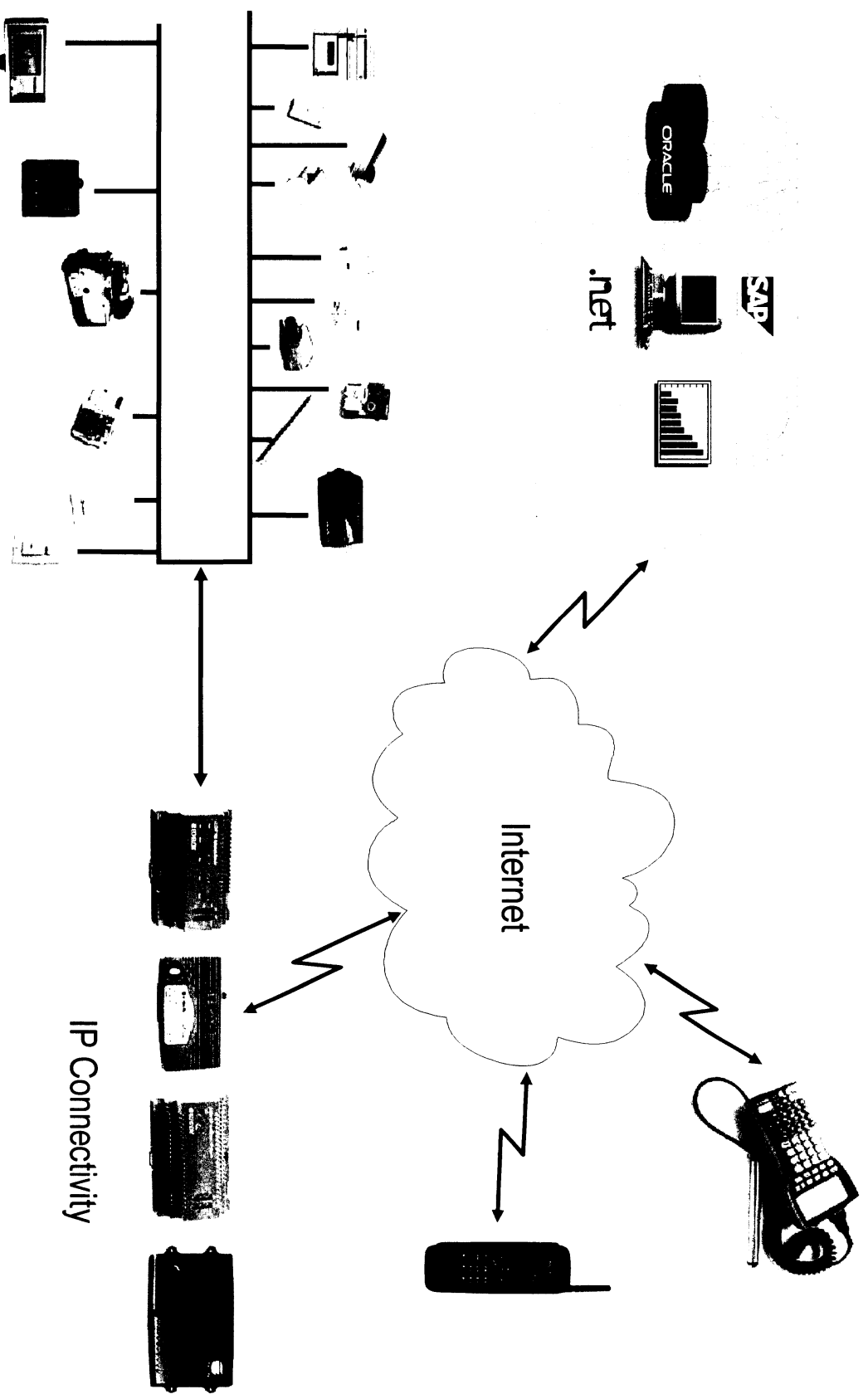
Routers, Internet Servers



31

ECHELON™

...from the smallest systems to networks that span the globe.



Echelon & power line communications

- **A pioneer in PL Communications for over 12 years**

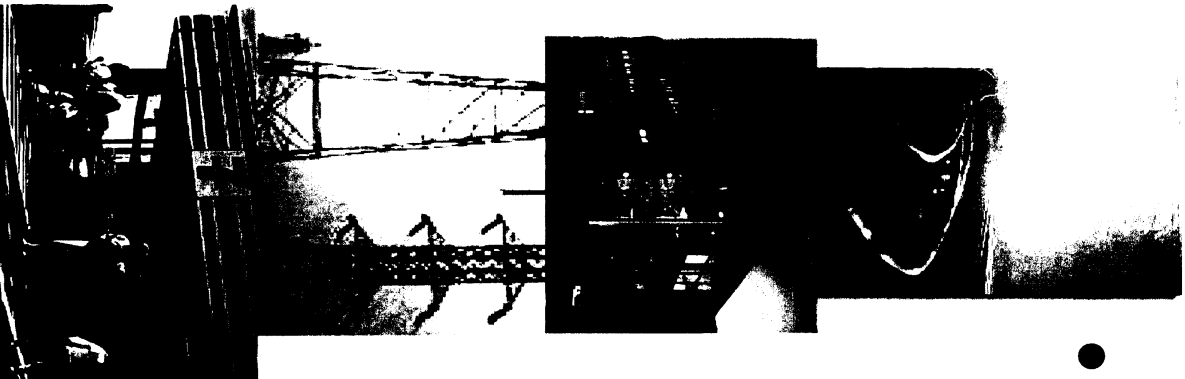
Millions of devices in home automation, utility, commercial building, transportation and industrial applications worldwide

Holder of 38 U.S. patents in PL technology

Only company with expertise in Spread Spectrum and Narrow Band transceiver technologies

- Dual Frequency Narrow Band technology has replaced Spread Spectrum technology – Dual Frequency Narrow Band offers significantly more robust signaling

Echelon focuses on PL solutions optimized for control applications (not for data networking applications)



4th Generation Narrowband Power Line Transceiver

- **ANSI 709.2 power line transceiver**



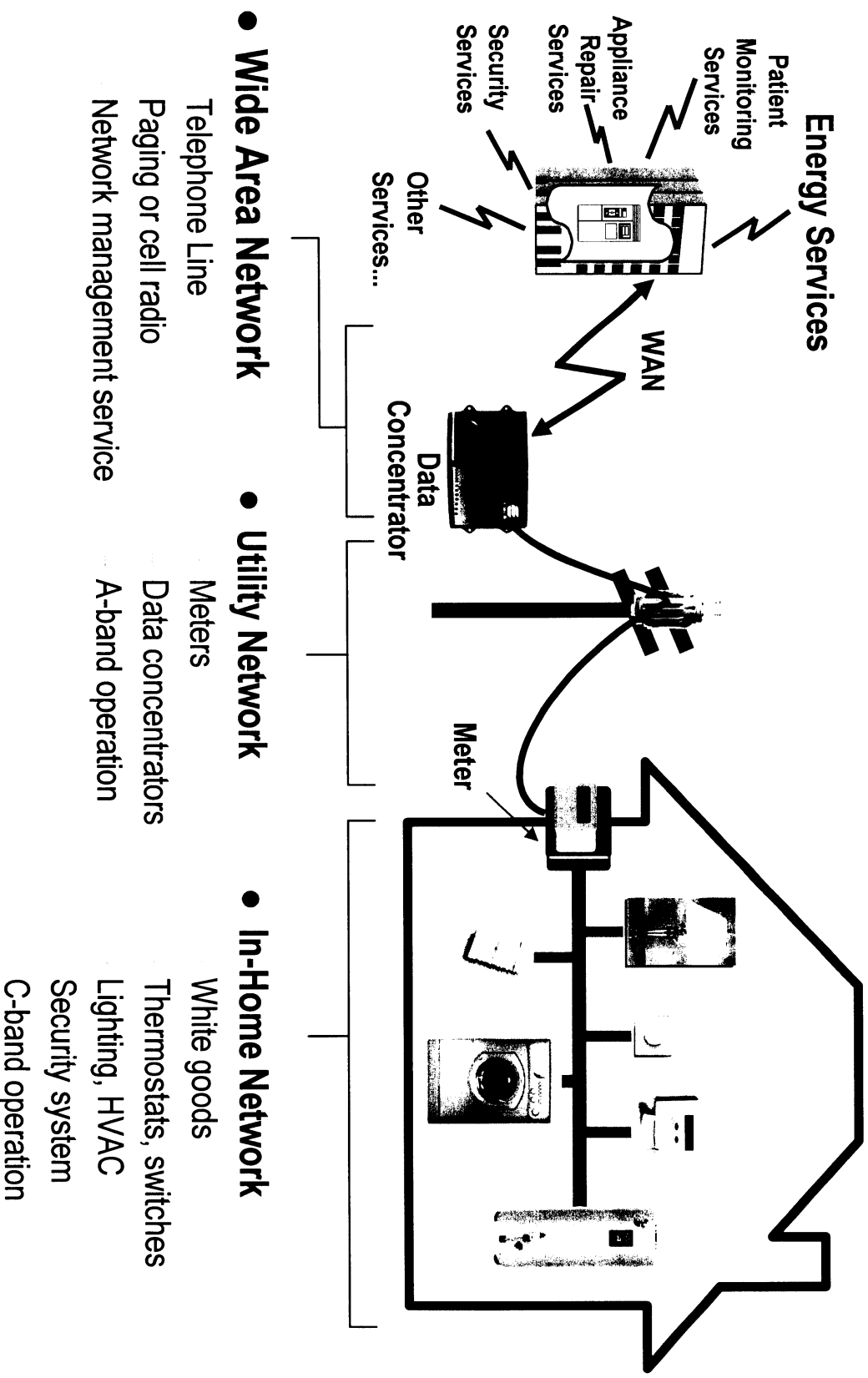
- **Reliable power line technology**

- Unique dual carrier operation
- 5kbs data rate, PSK modulation
- Patented low-overhead error correction
- DSP based noise cancellation and distortion correction
- High power amplifier

- **Worldwide power line operation**

- Complies with FCC, Industry Canada, Japan MPT, and European CENELEC EN 50065 regulations

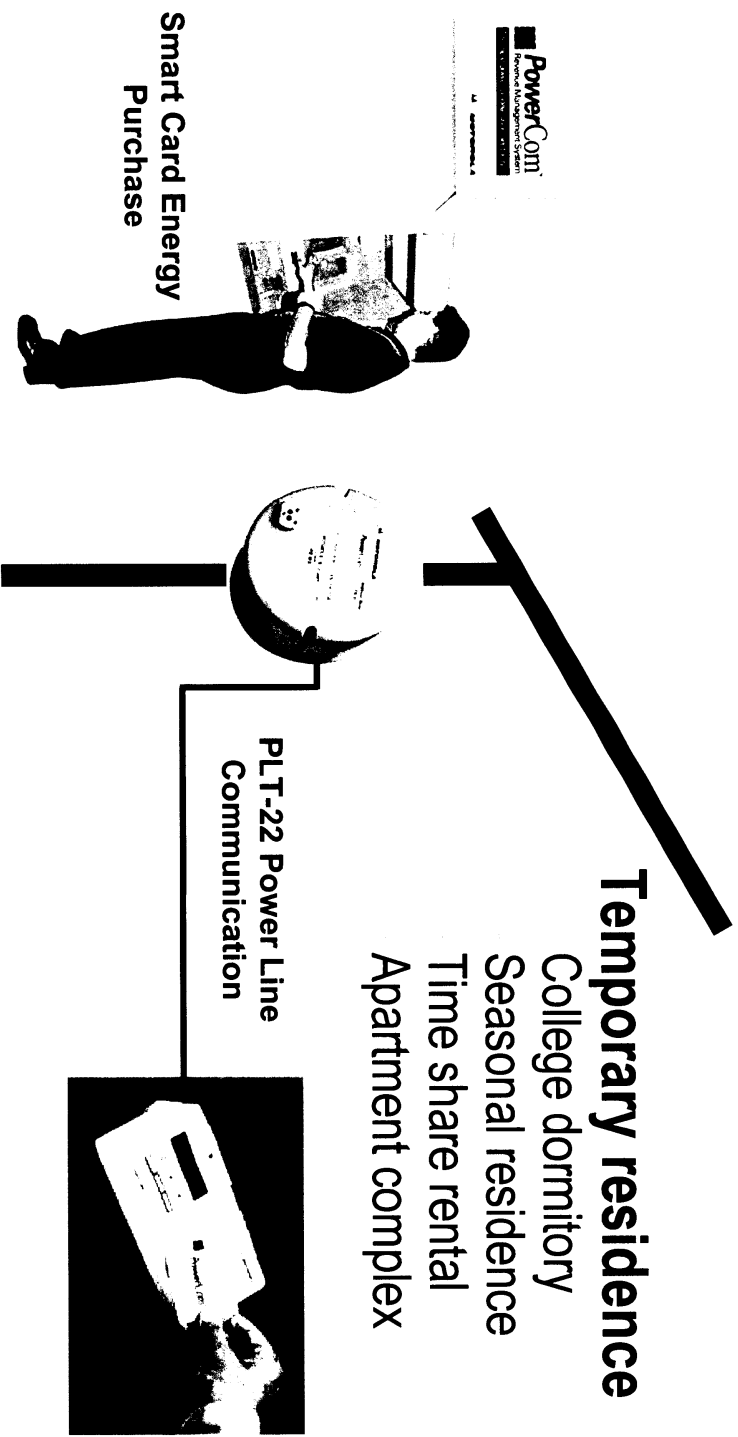
Utility-managed NES[®] System Architecture



Motorola



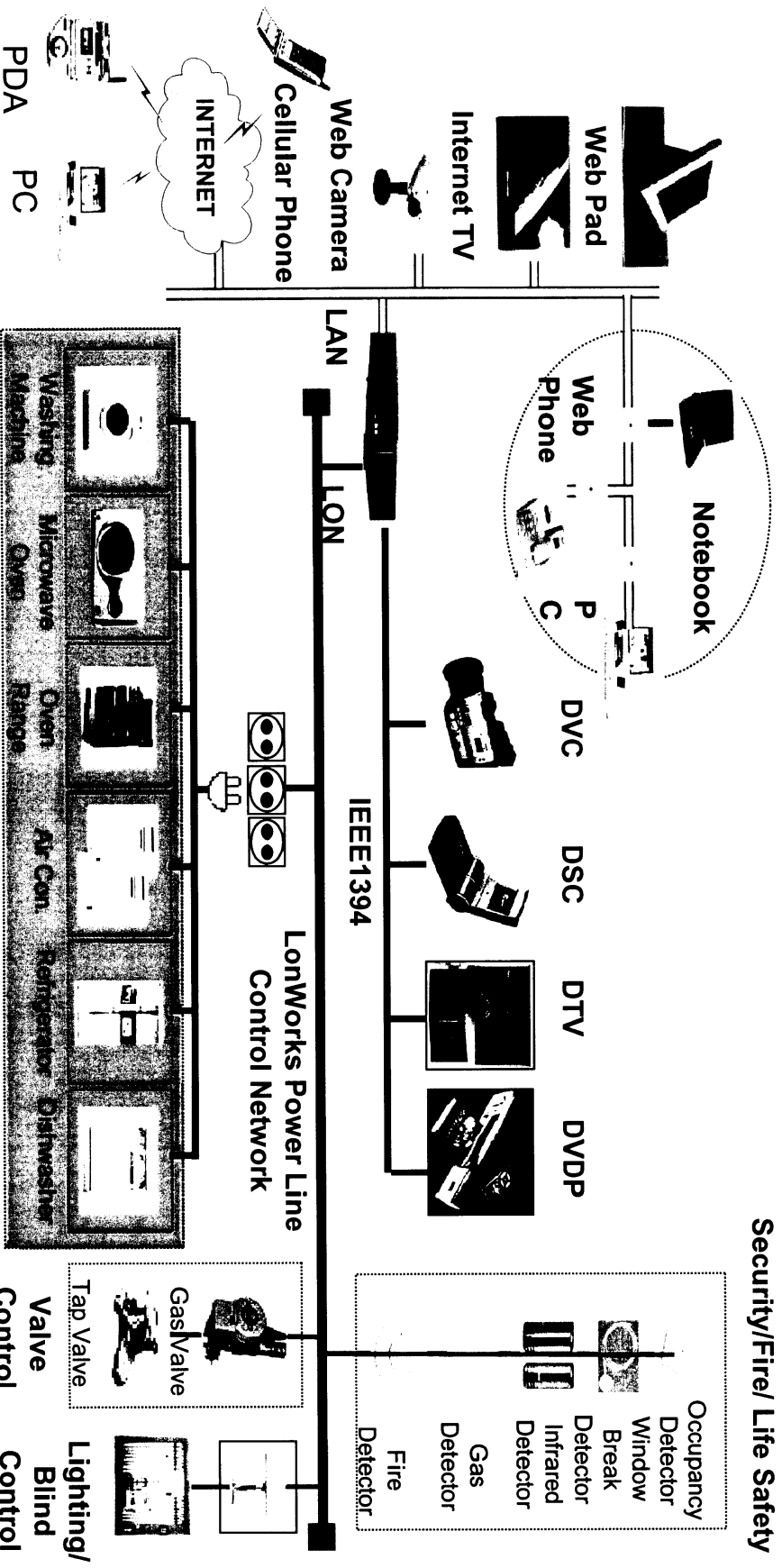
Prepaid Energy Services



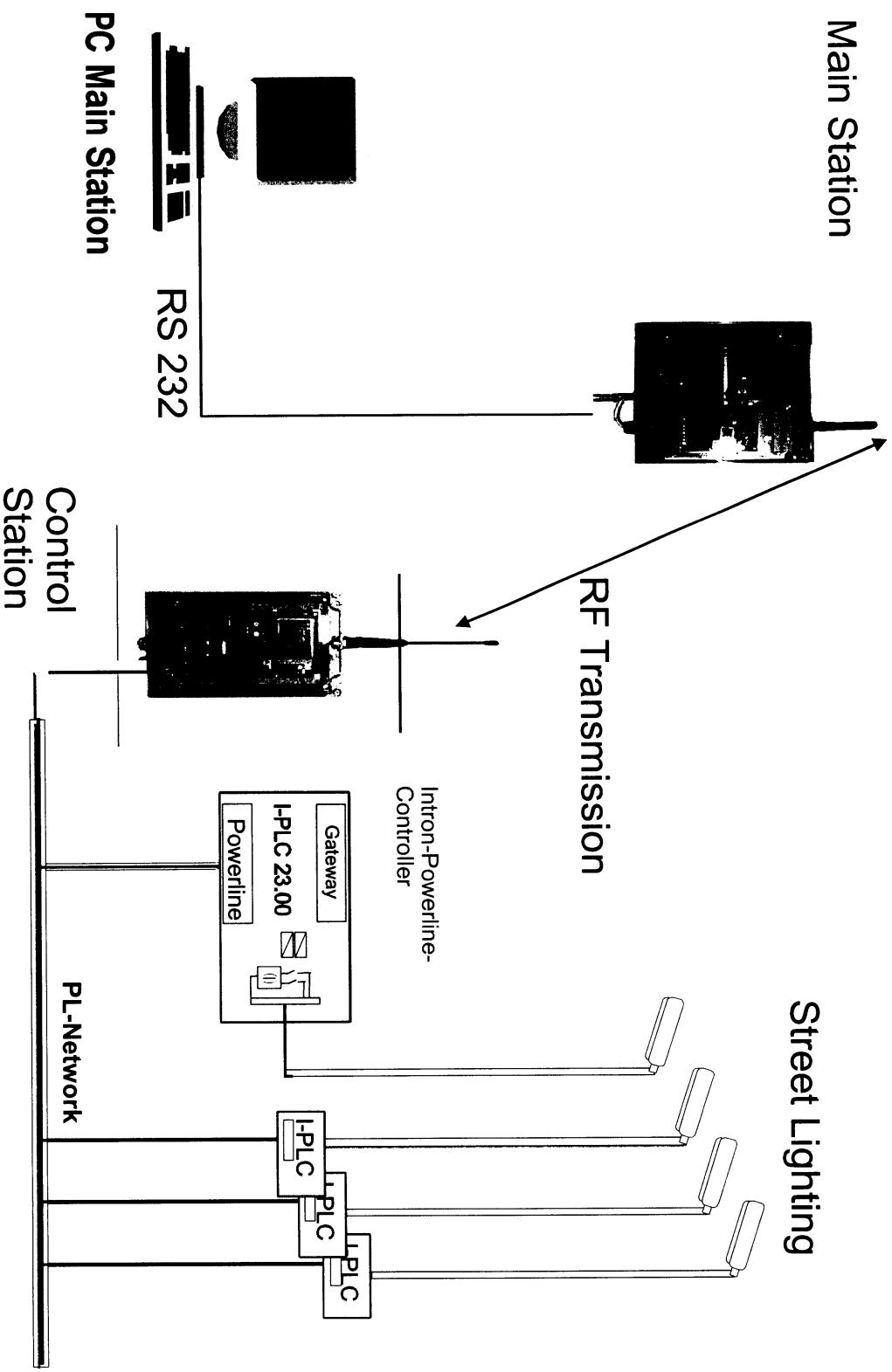
Improved utility management
eliminates manual meter reading, no
high risk debt

ECHOLON

Intelligent home architecture



Intron Engineering Street lighting control via power line



Acrolon Technologies Winery Controls

- Typical winery contains 15 fermentation tanks, 400 meters of cabling, 30 junction boxes, and 240 wire terminations.

Uses Echelon's PLT-22 Power Line Transceiver to communicate with tank controllers

Signaling uses the same power mains already wired for the tank variable frequency motor drives

Customers save hundreds of installation dollars per tank

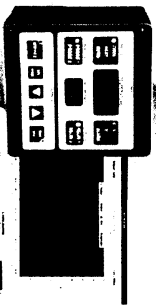
"I can't imagine living without TankNET now that we have it"

Don D. Andrews, CellarMaster, Robert Mondavi Winery, Oakville

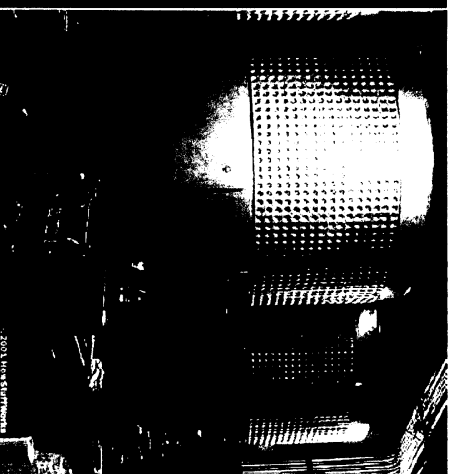
There's a lot to recommend being an early adopter. Starting about 10 years ago, we implemented a system. TankNET's 4000 identity giving tank wine immediate access to reliable information for the entire winery. The system is web-enabled, has information available on any browser, any time, and anyone. In real time.

Acrolon Technologies, Inc.

707.938.1300 www.acrolon.com



TANKNET
TEMPERATURE CONTROL AND
FERMENTATION INFORMATION SYSTEM

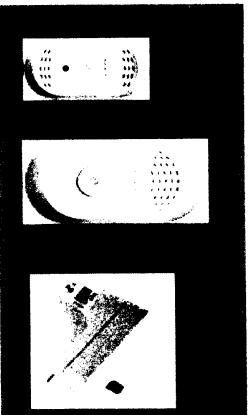


2003 Wine Spectator

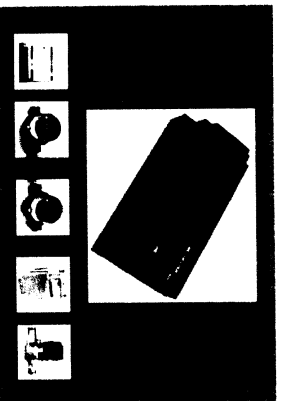
Acacia Vineyard
 Abeja Winery
 Canoe Ridge Vineyard
 Domain Carneros
 Duckhorn Wine Company
 Dynamite Vineyards
 Etude Wines
 Beringer Blass Wine Estates
 Gainey Vineyard
 J. Lohr
 Keller Estate
 Kenwood Vineyards
 Korbel Champagne Cellars
 Monterey Wine Company
 Mountain Vineyard
 Ravenswood
 Raymond
 Robert Mondavi Winery
 Rodney Strong
 Rutherford Hill
 Stags' Leap Winery
 Vineyard 29

MIAT

MIAT MICRO
ARCHITECTURE
TECHNOLOGIES



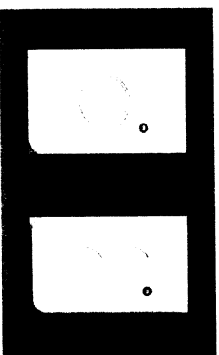
Gas detect and valve controller



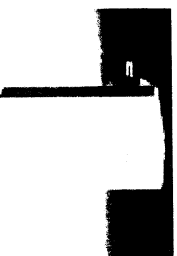
meter reading module



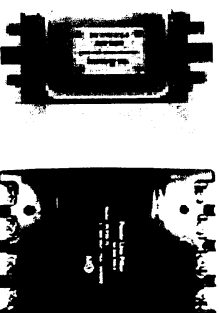
Embedded type module



Switches



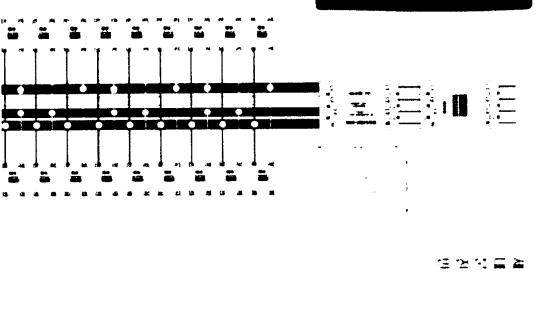
AC outlet



Blocking Filter



OSGi gateway



- General IO module
- Ethernet/EIA709.2 gateway...

Why is Echelon Here Today?

Proposed Part 15 Rule Change

2. Section 15.3 is proposed to be amended by adding paragraph (ff) to read as follows:
§15.3 Definitions.

(f) Access BPL systems shall incorporate adaptive interference mitigation techniques such as dynamic or remote reduction in power and adjustment in operating frequencies, in order for Access BPL installations to avoid site-specific, localized use of the same spectrum by licensed services. Access BPL systems shall incorporate a shut-down feature to deactivate units found to cause harmful interference.

(ff) Access Broadband over power line (Access BPL): A carrier current system that transmits radio frequency energy by conduction over electric power lines owned, operated, or controlled by an electric service provider. The electric power lines may be aerial (overhead) or underground.

- The proposed definition of Access BPL encompasses all carrier current systems, including broadly deployed existing low-speed, low-frequency carrier current systems (X-10, CEBus, LonWorks) that today coexist under current Part 15 rules.

- Adding adaptive mitigation techniques to these devices is both unnecessary and would add so much cost as to force these devices off the market.

Remedy: Revise §15.3 (FF)

Redefine Access BPL to exclude low-power, low-speed carrier current systems, as follows:

(ff) Access Broadband over power line (Access BPL): A carrier current system, with an operating frequency of >1705 KHz, that transmits radio frequency energy by conduction over electric power lines owned, operated, or controlled by an electric service provider. The electric power lines may be aerial (overhead) or underground.

(new language underscored).